Please replace the Abstract of the Invention with the following paragraph:

An apparatus comprising including a first processing circuit and a second precessing circuit. The first processing circuit may be configured to generate a plurality of reconstructed samples in response to one or more macroblocks of an input signal. The second processing circuit may be configured to determine availability of intra 4 x 4 prediction modes for each luma subblock of a current macroblock in response to available reconstructed samples adjacent to the current macroblock.